



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS SITE MITIGATION
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(609) 984-2902

ANTHONY J. FARRO
ACTING DIRECTOR

3 APR 1987

The Honorable Herb Gorab, Mayor
Borough of Wood-Ridge
Municipal Building
81 Humboldt Street
Wood Ridge, NJ 07075

RE: Berry's Creek (Velsicol/Morton Thiokol) Site
Remedial Investigation/Feasibility Study (RI/FS)

Dear Mayor Gorab:

This correspondence is to provide your office with a status update of the Remedial Investigation/Feasibility Study for the subject Superfund site.

Item 1: Soil Sediment Sampling Adjacent To Tide Gate

On January 9, 1987 this office obtained four (4) surface sediment samples from the ground surface along the eastern bank of Berry's Creek and adjacent to the tide gate near the Velsicol property. These four (4) samples were chosen based on physical evidence as representative of Berry's Creek sediment that may have been redeposited from the creek bed onto the adjacent ground surface during the severe flooding that occurred in the area a week earlier. The samples were analyzed for the parameters: PCB's, Mercury (Hg), Cadmium (Cd), Arsenic (As), Zinc (Zn), Nickel (Ni), and Lead (Pb) which are the contaminants of highest concentration in the Berry's Creek basin based on historical documentation. Provided in Attachment 1 are the results of this sampling as reported by our contract laboratory, U.S. Testing Company.

Although the mercury values are slightly above anticipated background for New Jersey soils in general, the data does not indicate any substantial migration of mercury as a result of the storm that occurred. Of the remaining metals, cadmium and zinc are also slightly elevated relative to general New Jersey background, however as with mercury, no substantial migration from the creek is indicated. In addition, no PCB's were detected in any of the samples.

Item 2- Research Contract

As explained at our meeting on January 1, 1987, the research task of the scope of work for this RI/FS has been awarded to the U.S. Army Corps of Engineers Waterways Experiment Station (WES) in Vicksburg, Mississippi. The research will quantitate the influence of environmental variables on the bioavailability of mercury and other parameters to aquatic organisms from Berry's Creek sediment and will quantitate the influence of environmental variables on mercury methylation

and the migration of mercury and other parameters in Berrys Creek. In addition, the potential for mercury volatilization from the contaminated sediment will also be evaluated.

WES was given authorization to proceed with the research in August 1986. To date, the following items have been completed:

- contaminated Berry's Creek sediment shipped to WES
- laboratory analysis performed on sediment
- toxicity testing completed on sediment
- test systems set-up
- test organisms acquired
- Quality Assurance Project Management Plan (QAPMP) completed

Actual laboratory testing is scheduled to begin in approximately two (2) weeks. The entire research effort is scheduled to take two (2) years and is anticipated to be complete in August 1988.

Item 3 - RI/FS Contract Status

As explained at our meeting on January 9, 1987, the contract for the Remedial Investigation/Feasibility Study has not been bid and awarded to date for two (2) reasons. Specifically, (1) the Department and the responsible parties decided that the research work should precede the detailed delineation of the contamination in order to be in a better position to recommend a remedial action with current data and to be able to adapt the expensive data gathering effort based on preliminary research results; and (2) to address the amendments to the new Superfund law. This latter item affects not only this particular site but all Superfund sites. The implementing regulations of the Superfund law known as the National Contingency Plan are to be published in the Federal Register this summer. In the interim, the State is working with the Environmental Protection Agency to establish the appropriate contract scope of work items that will require completion in order to comply with the Superfund amendments for conducting a RI/FS.

It is our intent to solicit proposals the end of May and to have a contract signed in August.

Item 4 - Aerial Oversight of Berrys Creek Basin

The effort by your office's Emergency Management Coordinator, Mr. Harry Baker, in soliciting the resources of the State Police to supply a helicopter for an aerial reconnaissance of the project area and to supply the services of an expert photographer is much appreciated.

We will be contacting you in the very near future with a scheduled time and date for your participation in the reconnaissance.

Item 5 - Tide Gate Malfunction

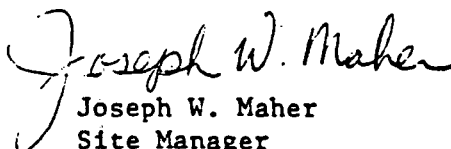
With regard to your office's notification to us that the tide gate is inoperable and contributes to the flooding problem being experienced in that area, we recommend that written notification be made to Bergen County which has maintenance responsibility for the tide gate. Our office would request the

opportunity to review and comment on any proposal by the County to repair the tide gate involving any disturbance of the contaminated Berry's Creek sediment.

For your information, the New York District Corps of Engineer official responsible for the Meadowlands District is Mr. George Nieves. He can be contacted at (212)264-0182 should you have any questions regarding their particular jurisdiction regarding the periodic flooding in this area.

Your keen interest and concern for an expeditious remediation of the subject site are shared by the Department. With your continued cooperation, we will diligently work to complete this complex remedial investigation/feasibility study. Should you have any questions regarding the specifics of this update, please contact me directly at 609-633-0765.

Sincerely,


Joseph W. Maher
Site Manager

HS40:jb

Enclosure

cc: Harry Baker, Wood-Rdige EMC
Dr. Merry Morris, NJDEP (SAC Chairman)
Charles Hanson, Velicol (SAC)
Arthur Slesinger, Morton-Thiokol (SAC)
Larry Schmidt, NJDEP (SAC)
Dr. Robert Tucker, NJDEP (SAC)
Dr. Richard Dime, NJDEP
Dr. Tom McNevin, NJDEP
Dr. Peter Brussock, NJDEP
Kevin Kratina, NJDEP
Charles DeWeese, NJDEP
Edward Putnam, NJDEP
Ed Konsevick, HMDC

ATTACHMENT I

Berry's Creek - Sampling Results (1/9/87: Soil/Sediment)

SAMPLE

<u>Parameter</u>	<u>BC001</u>	<u>BC002</u>	<u>BC003</u>	<u>BC004</u>
PCB	ND	ND	ND	ND
Arsenic (As)	BCDL	BCDL	BCDL	BCDL
Cadmium (Cd)	4. ⁴	4.1	BCDL	BCDL 3.5
Lead (Pb)	172.0	53.0	54.0	35.0
Mercury (Hg)	8.39	7.44	1.16	2.63
Nickel (Ni)	BCDL	BCDL	BCDL	BCDL
Zinc (Zn)	196.0	254.0	82.0	55.0

All Results in ^{mg}/kg (ppm)

ND - Non Detectable

BCDL - Below Contract Detection Limit